siRNA fragments is believed to be accomplished by RNase III. Elbashir et al., ibid., Elbashir, et al., *Genes and Devel.*, **2001**, 15, 188-200. Thus it is believed that the human RNase III of the present invention may be useful in further understanding and exploiting the RNAi mechanism, particularly in human cells. --

C1

Please replace the paragraph bridging pages 27 and 28 with the following:

-- Antisense inhibition of human RNase III expression was used to further evaluate the role(s) of RNase III. To identify optimal sites in RNase III mRNA for antisense effects, 2'-O-methoxyethyl chimeric antisense oligonucleotides targeted to 10 sites in the mRNA were designed and screened for inhibition of RNase III. These are shown in Table 1. These chimeric or "gapped" oligonucleotides are designed to serve as substrates for RNase H when bound to RNA resulting in degradation of the target RNA and oligonucleotides of this type have been shown to be highly specific when used under the described conditions. --

C2

In the Claims:

Please amend claims 1-3 to read as follows:

1. **(Amended)** An isolated human RNase III polypeptide which cleaves double-stranded RNA.

C3

2. **(Amended)** An isolated human RNase III polypeptide which comprises an amino acid sequence which is at least 90% homologous to SEQ ID NO: 2.

3. **(Amended)** The isolated human RNase polypeptide of claim 1 or 2 which comprises the amino acid sequence of SEQ ID NO: 2.

REMARKS

Claims 1-4 and 19 are pending and rejected.

The specification has been amended to correct typographical errors.

Claims 1-3 have been amended. Claim 1 was amended to further define the claimed invention. Support for the amendments can be found throughout the application